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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/657,650 Filing Date: September 08, 2003 Appellant(s): PACEY ET AL.

> Wayne L. Tang For Appellants

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 12-07-2009 appealing from the Office action mailed 07-09-2009.

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#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct

### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

5,380,007	TRAVIS et al.	01-1995
6,824,467	SCHLOTTMANN et al.	11-2004
5,324,035	MORRIS et al.	06-1994
2004/0015953	VINCENT	01-2004

"Physics for Game Developers," by David M. Bourg, 2002, O'Reilly and Associates, Inc., pages 33 to 43, "3D Particle Kinematics," entered as NPL 11-01-2006.

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 30 to 34, 38, 39, 40 to 44, 48, and 49 are rejected under 35 U.S.C. 103(a) as being obvious over Travis, et al. (U.S. patent 5,380,007 A) in view of Schlottmann, et al. (U.S. patent 6.824.467 B2).

As to Claims 30 and 40: Travis discloses all of the limitations of Claims 30 and 40 but lacks specificity as to the simulation rule data and the physical object data being selected as to yield a pre-selected desired outcome probability of a plurality of possible wagering outcomes. Travis teaches a method of operating a gaming system comprising: storing simulation rule data and physical object data (7:64-8:34), the physical object data defining physical objects (ball locations, for example, 8:5-6), the simulation rule data defining rules of a simulated world that affect the physical objects (motion equations, 8:5, air speed, 8:11-12); accepting a wager to play a wagering game (coin slot, Fig. 1); based on the physical object data and the simulation rule data, simulating actions of the physical objects within the simulated world to randomly select a simulated outcome from a plurality of possible simulated outcomes according to a predetermined outcome probability distribution (bouncing balls drawn to form game outcome or combination of winning numbers, Abst., Fig. 1); graphically rendering the

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actions and the simulated outcome; and providing an award if the selected simulated outcome represents a winning condition (Abst., Figs. 1, 6, 8) as selected by the RNG (4:20-25).

Travis has a wager input device and a display (Fig. 1). As an electronic gaming apparatus, Travis will inherently have memory and a controller. Travis teaches that the desired outcome probability distribution is readily apparent and discernible to a player of the wagering game. The examiner points to the four columns in Fig. 1, each containing eleven balls respectively marked 0 to 9 and "Slotto" (Fig. 1, 3:52-54, 4:16-28). The probability distribution is thus readily apparent and discernible to the player since each ball in a respective column will have a one-in-eleven chance of being selected.

Schlottmann, however, teaches the simulation object data and the physical object data being selected to yield a pre-selected outcome probability distribution of a plurality of possible simulated outcomes. This can be done a couple of different ways. Fig. 4 discusses defining the physical parameters of the model; running a Monte Carlo test to determine the probability of each outcome; and evaluating if the distribution of outcomes is satisfactory, and if not altering the model (7:24-44). Fig. 6 discusses defining the physical parameters of the model; creating a list of allowed initial conditions, and determining via the model the outcome for each set of initial conditions; and evaluating if the distribution of outcomes is satisfactory, and if not altering the model and/or the list of initial conditions (8:26-58).

The physical object data of Schlottmann are taught in (6:3-12). The simulation rule data of Schlottmann are taught in the simulation of quantities such as inclination of

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play field, friction, shape, size, resiliency, trajectory, velocity, spin, etc. (5:17-42). The teachings of Schlottmann would have allowed one of ordinary skill in the art at the time of invention to develop a physical model using an iterative process until an even one-on-eleven distribution was obtained for a column of lottery balls such as depicted in Travis (Fig. 1).

Schlottmann teaches a predetermined probability distribution of the plurality of possible simulated outcomes being defined by the interaction of the physical object data and the simulation rule data (Abst.). Fig. 4, step 52 and Fig. 6, step 72 would be evaluated using Monte Carlo analysis for the following reasons: because of the possibility of trillions (6:17) or more possible routes for the ball to take, a Monte Carlo analysis is done of all the possible outcomes to assign them a probability (Col. 6) to relieve the burden of evaluating all of the possibilities during game play which would slow down the game.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the predetermined distribution of Schlottmann to the game of Travis. Schlottmann teaches the possibility of doing these calculations for games involving balls colliding with each other (15:34-60), which is exactly the type of game of Travis (Abst.). Additionally, the selection of simulation rule data and physical object data to determine a desired probability distribution (Schlottmann, Figs. 4 and 6) can be used for more complex analyses such as those of a pachinko game (Fig. 8, 9:44-63), which does not have a readily discernible probability distribution such as the lottery ball tubes of Travis. The only intuitive aspects of the distribution of the pachinko

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game of Schlottmann (Fig. 8) is that the ball will be more likely to come down in the left of the play field, with decreasing probabilities the further away from the left side the distance is. The ball of Schlottmann Fig. 8 is more likely to be on the left since it is shot from the right of the play field to the left. This intuitive aspect of the distribution is borne out in Schlottmann Table 14 (Col. 13) which lists the outcomes as slot 4 (59%), slot 1 (35%), slot 2 (5%), and slot 3 (1%). Since the method of Schlottmann can be used for a more complex probability distribution such as pachinko, it would certainly be simple to use it do develop a readily discernible outcome such as the one-in-eleven distribution of the lottery ball columns (Fig. 1) of Travis. This obviousness would also apply to even distributions such as roulette (1 in 38, or 1 to 36, 0, and 00) and dice (1 in 6).

Schlottmann would also have the advantage of using the simulation rule data and physical object data to select the random outcome instead of using an RNG as in Travis (Fig. 5, step 61, select initial conditions which would be run within the limits determined in steps 51, 52, and 53 of Fig. 4; step 62, run the physical model until the game ends; 63 evaluate outcome; 64 lookup outcome; 65 award player; similar steps in Fig. 7). The advantage of this modification would be to make the simulation more realistic by using a simulation of the actual motion instead of an RNG to generate the random result (each collision of pachinko ball in Figs. 11 & 13 being a separate random event as the pachinko ball goes down the field of play, Schlottmann) instead of merely selecting a random number to determine the outcome of the simulation as is done in Travis (5:20-24). This method of determining paytables by using a Monte Carlo analysis of all possible game outcomes and determining the random outcome using the interaction of

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physical object data and simulation rule data would also serve to create a verifiable mathematical model which could be independently verified by state gaming authorities or their designated contractors to ensure the fairness of the game. Eliminating the RNG would also serve to deter tampering with the gaming package since the random outcome would be organically determined by the game program as a whole instead of by a discrete RNG (whether in software or firmware), as a simple, stand-alone RNG would be more easily tampered with than an entire program.

As to Claims 31 and 41: The simulating and the rendering occur simultaneously such that the actions and the simulated outcome are rendered in real time (motion calculations and ball display done iteratively screen by screen, Fig. 8).

As to Claims 32 and 42: The simulating occurs prior to the rendering such that the simulated outcome is selected prior to being rendered (non-mathematical means of generating simulated tumble of balls, by obtaining next symbol positions from memory instead of calculating them mathematically, 8:37-50). This is analogous to the previously cited Siekierski, et al. in 4,527,798 A using a random number generator to select a random previously recorded horse race (Col. 6, Col. 13, Line 60 to Col. 15, Line 10).

As to Claims 33 and 43: Travis further teaches randomly modifying the simulation rule data such that pre-defined organizations of the physical objects provide different ones of the simulated outcomes (non-mathematical means of generating simulated tumble of balls, by obtaining next symbol positions from memory instead of calculating them mathematically, 8:37-50). This is analogous to the previously cited

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Siekierski, et al. in 4,527,798 A using a random number generator to select a random previously recorded horse race (Col. 6, Col. 13, Line 60 to Col. 15, Line 10).

As to Claims 34 and 44: Travis further teaches modifying the simulation rule data by bounds to control the possible simulated outcomes (7:42-60, adjusting play percentage variables to comply with statutorily required payouts).

As to Claims 38 and 38: The simulating commences from a randomly chosen initial condition (balls allowed to tumble for random time period (7:5-11). The examiner notes that the claim language does not cite a random initial arrangement of cards in a deck to be shuffled, a random physical arrangement of balls to be tumbled as in the ball-tumbling game of Travis, or a random number generator seed being randomly selected such as based on ambient weather, thermal noise, etc.

As to Claims 39 and 49: The simulating includes influencing the actions with a random variable (numbers randomly generated, 7:24-40, the examiner notes that the claim language does not cite a random number generator seed being randomly selected such as based on ambient weather, thermal noise, etc.).

As to Claim 50: Claim 50 is rejected for similar reasons to Claim 30, in that it is a computer-readable medium drawn to the method of Claim 30. The examiner notes that Claim 50 is a separate independent claim as it is drawn to a separate statutory class of subject matter.

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Claims 36, 37, 46, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Travis and Schlottmann in view of Morris, et al. (U.S. patent 5,324,035 A).

As to Claims 37 and 47: The combination of Travis and Schlottmann discloses all of the limitations of Claims 37 and 47, but lacks specificity as to the simulated outcome being selected prior to being rendered. Travis teaches the simulating and the rendering occurring in part simultaneously (Fig. 8). Morris, however, teaches the simulated outcome being selected prior to being rendered (Abst.; 2:35-3:27, pools of predetermined outcomes for video lottery terminals). It would have been obvious to one of ordinary skill in the art to have applied the predetermined pools of Morris (which is disclosed in its main embodiment to video lottery systems) to combination of Travis and Schlottmann. 5:35-40 of Morris describes the system being applied to various other types of lottery games besides video lotteries, such as slots, craps, and roulette. Each of these games involves the random motion of a physical object (random stopping of slot reels, dice, or roulette wheels, respectively), analogous to 007's random stopping of tumbling lottery balls; this demonstrates the applicability of Morris's predetermined pools of outcomes to gambling games based on random motion of physical objects. The advantage of this modification would be to provide central determination of the lottery numbers (Morris, Abst.) to lend security to the gaming device, and to allow use of the video lottery system in jurisdictions which do not allow the use of random number generators within the gaming devices themselves.

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As to Claims 36 and 46: Morris further teaches the simulation rule data including common rule data applicable to different types of wagering games such that the 3D processor need not be updated with the common rule data for the different types of wagering games (the pools of outcomes can be applied to any number of types of games, 5:35-40).

Claims 35 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Travis, Schlottmann, and Morris in view of Vincent (U.S. pre-grant publication 2004/0015953 A1, application 09/811,977).

As to Claims 35 and 45: The combination of Travis, Schlottmann, and Morris teaches all of the limitations of Claim 35, but lacks specificity as to the simulating and the rendering being performed by a 3D processor that receives the simulation rule data and the physical object data from a central processor. Vincent, however, in U.S. pregrant publication 2004/0015953 A1, at Para. 9 teaches three-dimensional graphics software being updated over a network when a new version is available. It would have been obvious to one of ordinary skill in the art to have made this modification to the combination of Travis, Schlottmann, and Morris. The suggestion for 3-D graphics can be found in the previously cited "Physics for Game Developers" ("3D Particle Kinematics," Pages 33 to 43, by David M. Bourg, 2002 O'Reilly and Associates, Inc., hereafter referred to as "Physics", entered as non-patent literature by the examiner on Nov. 1st, 2006) which elaborates on the mathematical models already taught by Travis (7:64-8:34). The advantage of the 3-D graphics would be to make the visual display

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more realistic as actual lottery balls used in real life are three—dimensional objects. This also takes advantage of the network of Morris which is already used to distribute the gaming result pools to the client terminals. This modification would have the advantage and effect of allowing the latest software to be downloaded to the gaming terminals as soon as it becomes available. This would have the further advantage of allowing the client terminals to play any of the games listed in Morris (5:35-40, blackjack, poker, slots, roulette, etc.) without being manually reconfigured and to adapt to changing gaming regulations as soon as they take effect.

## (10) Response to Argument

Travis teaches that the desired outcome probability distribution is readily apparent and discernible to a player of the wagering game. The examiner points to the four columns in Fig. 1, each containing eleven balls respectively marked 0 to 9 and "Slotto" (Fig. 1, 3:52-54, 4:16-28). The probability distribution is thus readily apparent and discernible to the player since each ball in a respective column will have a one-in-eleven chance of being selected.

Schlottmann teaches the simulation object data and the physical object data being selected to yield a pre-selected outcome probability distribution of a plurality of possible simulated outcomes. This can be done a couple of different ways. Fig. 4 discusses defining the physical parameters of the model; running a Monte Carlo test to determine the probability of each outcome; and evaluating if the distribution of outcomes is satisfactory, and if not altering the model (7:24-44). Fig. 6 discusses defining the

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physical parameters of the model; creating a list of allowed initial conditions, and determining via the model the outcome for each set of initial conditions; and evaluating if the distribution of outcomes is satisfactory, and if not altering the model and/or the list of initial conditions (8:26-58).

The physical object data are taught by Schlottmann in (6:3-12). The simulation rule data are taught in the simulation of quantities such as inclination of play field, friction, shape, size, resiliency, trajectory, velocity, spin, etc. (5:17-42). The teachings of Schlottmann would have allowed one of ordinary skill in the art at the time of invention to develop a physical model using an iterative process until an even one-on-eleven distribution was obtained for a column of lottery balls such as depicted in Travis (Fig. 1). 467 teaches a predetermined probability distribution of the plurality of possible simulated outcomes being defined by the interaction of the physical object data and the simulation rule data (Abst.). Fig. 4, step 52 and Fig. 6, step 72 would be evaluated using Monte Carlo analysis for the following reasons: because of the possibility of trillions (6:17) or more possible routes for the ball to take, a Monte Carlo analysis is done of all the possible outcomes to assign them a probability (Col. 6) to relieve the burden of evaluating all of the possibilities during game play which would slow down the game.

The examiner believes It would have been obvious to one of ordinary skill in the art at the time the invention was made, as discussed in the rejections above to have applied the predetermined distribution of Schlottmann to the game of Travis.

Schlottmann teaches the possibility of doing these calculations for games involving balls

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colliding with each other (15:34-60), which is exactly the type of game of Travis (Abst.). Additionally, the selection of simulation rule data and physical object data to determine a desired probability distribution (Schlottmann, Figs. 4 and 6) can be used for more complex analyses such as those of a pachinko game (Fig. 8, 9:44-63), which does not have a readily discernible probability distribution such as the lottery ball tubes of Travis. The only intuitive aspects of the distribution of the pachinko game of Schlottmann (Fig. 8) is that the ball will be more likely to come down in the left of the play field, with decreasing probabilities the further away from the left side the distance is. The ball of Schlottmann Fig. 8 is more likely to be on the left since it is shot from the right of the play field to the left. This intuitive aspect of the distribution is borne out in Schlottmann Table 14 (Col. 13) which lists the outcomes as slot 4 (59%), slot 1 (35%), slot 2 (5%), and slot 3 (1%).

Since the method of Schlottmann can be used for a more complex probability distribution such as pachinko, it would certainly be simple to use it do develop a readily discernible outcome such as the one-in-eleven distribution of the lottery ball columns (Fig. 1) of Travis. This obviousness would also apply to even distributions such as roulette (1 in 38, or 1 to 36, 0, and 00) and dice (1 in 6). Schlottmann would also have the advantage of using the simulation rule data and physical object data to select the random outcome instead of using an RNG as in Travis (Fig. 5, step 61, select initial conditions which would be run within the limits determined in steps 51, 52, and 53 of Fig. 4; step 62, run the physical model until the game ends; 63 evaluate outcome; 64 lookup outcome; 65 award player; similar steps in Fig. 7). The examiner believes an

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advantage of this modification would be to make the simulation more realistic by using a simulation of the actual motion instead of an RNG to generate the random result (each collision of pachinko ball in Figs. 11 & 13 being a separate random event as the pachinko ball goes down the field of play, Schlottmann) instead of merely selecting a random number to determine the outcome of the simulation as is done in Travis (5:20-24).

As a further advantage, this method of determining paytables by using a Monte Carlo analysis of all possible game outcomes and determining the random outcome using the interaction of physical object data and simulation rule data would also serve to create a verifiable mathematical model which could be independently verified by state gaming authorities or their designated contractors to ensure the fairness of the game. Eliminating the RNG would also serve to deter tampering with the gaming package since the random outcome would be organically determined by the game program as a whole instead of by a discrete RNG (whether in software or firmware), as a simple, stand-alone RNG would be more easily tampered with than an entire program.

Regarding the appellants' arguments on page 5 of the brief, independent claims 30 and 40 do not pertain to a three-dimensional object interaction to obtain a random result. The three-dimensional interaction pertains to dependent claims 35 and 45, which have not been argued by the appellants. The examiner was relying on Schlottmann's object interactions to obtain a random result for the play of the game. The appellants are overemphasizing the Monte Carlo analysis of Schlottmann with runs a limited number of the possible outcomes in order to obtain a likely statistical

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distribution for all the possible outcomes of the process being simulated. The simple fact of the matter, and indeed the main issue here, is that Schlottmann runs an object interaction for the purpose of obtaining a result instead of using a random number generator, which is what the examiner attempted to make clear with the 103 combination of Travis and Schlottmann above. Schlottmann in Fig. 4 at step 51 defines the physical parameters of the model. Schlottmann at step 52 runs a Monte Carlo test to determine the probability of each outcome, using a random sampling of starting conditions. This means that Schlottmann runs the simulation comprising the physical object interaction using physical object data and simulation rule data at least once. The examiner was applying this physical object interaction to Travis to use it to produce the game result instead of using Travis's RNG to produce the game result, for what the examiner believes are the advantages outlined in the rejection above. The examiner is showing that the physical object interaction does not have to be only used for developing paytables or game outcome distributions, even though these are the main intents of Schlottmann. The appellants on page 6 of the brief generally characterize the Travis base reference.

The appellants generally characterize the Schlottmann reference on page 7 of the brief. Schlottmann teaches physical object data at 6:4-13: "In this technique, the game model follows, as closely as possible, the behavior of a physical game. Since the model is deterministic, the outcome of the game is dependent only on the initial parameters of the game, i.e., the initial conditions of each ball launch, such as the speed, angle and spin of the ball. The following descriptions will be based on the assumption that these are the only relevant

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initial conditions, but it will be appreciated that other parameters could be added without affecting the technique." Schlottmann teaches physical object data at 5:17-42: "A significant aspect of the invention is that the actual play of the video game is based, not on a stored collection of ball routes, but rather on a mathematical model of the game stored in memory, which model includes a number of rules which govern the physical movement of the ball, using known mathematical modeling techniques, to which are applied a set of initial conditions under which the ball is placed in motion. In an actual physical game, it will be appreciated that this movement is affected by not only by the initial conditions or parameters under which the ball is launched, but also by the physical characteristics of the ball itself, the inclination of the play field, the physical characteristics of the play field, such as friction and the like, the arrangement of the play field boundary walls and obstacles and the like. Each time a ball collides with an obstacle, such as a wall of the play field, a peg 42, another ball or the like, the way in which its route will be altered will be a function of physical characteristics of the obstacle, such as shape, size resiliency, etc., and the trajectory, velocity and spin etc. of the ball at the time of collision. It can be seen that, in the physical game, these factors which affect ball movement are extremely complex and would be virtually impossible to completely accurately reproduce in a mathematical model. Thus, the model is necessarily somewhat simplified, but will, to the extent possible, represent realistic game conditions." The examiner believes that these techniques can be legitimately used to simulate a physical object interaction using a single simulation run for the purposes of game play, as well as for Schlottmann's main purpose of repeated simulations for statistical analysis. A physical object interaction, if

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accurately modeled is exactly that, a physical object interaction; nothing about such a simulation teaches away from or would be destroyed for its intended mode of operation by being used to generate a game result.

The examiner believes, contrary to the appellants' remarks on pages 7 and 9 of the brief that if Travis's video bingo game is accurately simulated using Schlottmann's physical object interaction that the data will yield a pre-selected desired outcome probability distribution of a plurality of possible outcomes. Travis's video bingo game has four cylinders, each filled with eleven balls, labeled 0 through 9, and another balled labelled "Slotto" (Fig. 1: 4:16-28). If this game is accurately modeled using physical object data and simulation rule data, the results will necessarily approximate, if not be exactly equal to, a 1-in-11 chance of each ball in a particular column being drawn in any game play; therefore the teachings of Schlottman as applied to Travis above would necessarily yield a pre-selected desired outcome probability distribution of a plurality of possible simulated outcomes. Since each column has 11 balls, the outcome probability distribution is therefore readily apparent to the player as cited in the independent claims. Regarding the appellants' remarks in the last paragraph of page 7 and first paragraph of page 8, the examiner has addressed this above in the rejection of Claims 30 and 40 by replacing Travis's RNG with Schlottmann's physical object interaction for the purposes of making the game more realistic.

Regarding the appellants' remarks on pages 8 and 9, the examiner disagrees. Schlottmann states that his techniques can be used to generate a desired outcome distribution to both make the game realistic and for the purposes of attracting and

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retaining player interest (7:30-35): "The routine then checks at 53 to see if the distribution of outcomes is satisfactory, i.e., either provides a realistic simulation of actual physical game conditions or provides a distribution which will be conducive to generating player interest and excitement." An outcome distribution as disclosed by this passage of Schlottmann accurately used to model Travis's 1-in-11 bingo game for purposes of generating a game play result will necessarily as discussed above, generate a desired outcome probability readily discernible to the player. Travis's bingo game cannot have a result other than one-ineleven. Schlottmann's physical object interaction techniques can thus be both used on a one-off basis for generating the result of the game play as discussed in the rejections of the independent claims as well as to derive the paytables as outlined in Schlottmann Fig. 4 (7:24-44) and Fig. 6 (8:26-58). Figs. 4 and 6 of Schlottmann both illustrate iterative feedback loops in which the physical parameters of the model are altered to make the outcome distributions satisfactory (Fig. 4, 51, 52, 53; Fig. 6, 71, 72, 73). This should be straightforward to do as applied to Travis, since the balls in each column each have a one-in-eleven chance of being drawn. As discussed at length above, if Schlottmann's techniques can be used to accurately simulate a complex game such as pachinko whose outcome distribution is not readily visually discernible to the player, it can certainly be used to accurately simulate a simple game such as Travis's bingo game whose outcome distribution is readily visually discernible to the player.

Regarding the appellants' remarks on pages 10 and 11, the examiner has discussed these regarding the points made pertaining to pages 7 to 9 of the brief. The examiner previously attempted to indicate allowable subject matter pertaining to the

appellants' roulette embodiment, believing if the appellants cited how the claimed invention interacted with the roulette game in a non-obvious manner, the independent claims would be allowable (FR, 07-09-2009, pages 13 to 15). The examiner believed that broader independent claims 30 and 40 as presently cited were not allowable for the reasons indicated above.

The examiner respectfully disagrees with the appellants as to the claims' condition for allowance.

#### (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Matthew D. Hoel/

Examiner, Art Unit 3714

Conferees:

/Peter D. Vo/

Supervisory Patent Examiner, Art Unit 3714

/Dmitry Suhol/

Supervisory Patent Examiner, Art Unit 3714